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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/784,871	02/24/2004	Takahiro Kakumaru	8029-1061	8294
466 7590 08/14/2007 YOUNG & THOMPSON 745 SOUTH 23RD STREET 2ND FLOOR ARLINGTON, VA 22202			EXAMINER GARY, ERIKA A	
			ART UNIT 2617	PAPER NUMBER
			MAIL DATE 08/14/2007	DELIVERY MODE PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/784,871

Applicant(s)

KAKUMARU ET AL.

Examiner

Erika A. Gary

Art Unit

2617

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 24 February 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-85 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-18 and 43-60 is/are rejected.
- 7) ☒ Claim(s) 19-42 and 61-85 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2. Claims 1, 2, 43, and 44 are rejected under 35 U.S.C. 102(e) as being anticipated by Yamato, US Patent Number 6,954,651 (hereinafter Yamato).

Regarding claims 1 and 2, Yamato discloses a radio terminal unit which sends a radio base station a PS-Poll as a control packet for requesting delivery so as to receive packets buffered by the radio base station, comprising: a communication control section; a radio interface section; and a PS-Poll transmission timing changer for changing the timing of transmission of the PS-Poll according to the operation mode of one or more communication applications which are running on the radio terminal unit, wherein: the PS-Poll transmission timing changer determines the timing of transmission of the PS-Poll so that the PS-Poll is transmitted after transmission of data from the communication application [abstract; fig. 7; col. 6: lines 30-39; col. 8: lines 13-26; col. 10: lines 29-45; col. 11: lines 21-46].

Regarding claims 43 and 44, Yamato discloses a radio communication system which is a radio network system, comprising: one or more radio base stations and one or more radio terminal units claimed in claims 1 or 2 [abstract; fig. 7; col. 6: lines 30-39; col. 8: lines 13-26; col. 10: lines 29-45; col. 11: lines 21-46].

3. Claims 1, 2, 43, and 44 are rejected under 35 U.S.C. 102(e) as being anticipated by Meggers et al., US Patent Number 6,728,270 (hereinafter Meggers).

Regarding claims 1 and 2, Meggers discloses a radio terminal unit which sends a radio base station a PS-Poll as a control packet for requesting delivery so as to receive packets buffered by the radio base station, comprising: a communication control section; a radio interface section; and a PS-Poll transmission timing changer for changing the timing of transmission of the PS-Poll according to the operation mode of one or more communication applications which are running on the radio terminal unit, wherein: the PS-Poll transmission timing changer determines the timing of transmission of the PS-Poll so that the PS-Poll is transmitted after transmission of data from the communication application [abstract; col. 9: lines 6-49; col. 11: lines 1-18; col. 12: lines 36-50; col. 14: lines 29-33, 52-67; col. 15: lines 18-44].

Regarding claims 43 and 44, Meggers discloses a radio communication system which is a radio network system, comprising: one or more radio base stations and one or more radio terminal units claimed in claims 1 or 2 [abstract; col. 9: lines 6-49; col. 11: lines 1-18; col. 12: lines 36-50; col. 14: lines 29-33, 52-67; col. 15: lines 18-44].

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 3-18 and 45-60 are rejected under 35 U.S.C. 103(a) as being unpatentable over Meggers.

Regarding claims 3-18, Meggers suggests a radio terminal unit which sends a radio base station a PS-Poll as a control packet for requesting delivery so as to receive packets buffered by the radio base station, comprising: a communication control section; a radio interface section; and a PS-Poll transmission timing changer for changing the timing of transmission of the PS-Poll according to the operation mode of one or more communication applications which are running on the radio terminal unit, wherein: the PS-Poll transmission timing changer determines the timing of transmission of the PS-Poll so that the PS-Poll is transmitted after transmission of data from the communication application; the PS-Poll transmission timing changer detects a changeover in the communication applications, and determines whether there is a communication application that requires real-time processing based on information as to whether real-time processing is necessary or unnecessary attached to the data of each communication application every time the changeover is carried out; when there is at least one communication application that requires real-time processing, the communication control section transmits the PS-Poll to

the radio base station; when there is no communication application that requires real-time processing, the communication control section carries out intermittent receiving operation based on beacons transmitted from the radio base station; and the communication control section repeatedly receives the packets until no buffered packet remains in the radio base station by the PS-Poll [abstract; col. 9: lines 6-49; col. 11: lines 1-18; col. 12: lines 36-50; col. 14: lines 29-33, 52-67; col. 15: lines 18-44].

What Meggers does not specifically disclose is turning the power of the radio interface section off and on depending on whether or not there are buffered packets to be received by the radio terminal unit. However, the Examiner takes Official Notice that it is well known in the art to perform power control on a radio terminal unit by turning the power off and on based on when information is expected. At the time of the invention, it would have been obvious to one of ordinary skill in the art to modify Meggers to include this limitation to conserve battery power of the radio terminal unit.

Regarding claims 45-60, Meggers discloses a radio communication system which is a radio network system, comprising: one or more radio base stations and one or more radio terminal units claimed in claims 3-18 [abstract; col. 9: lines 6-49; col. 11: lines 1-18; col. 12: lines 36-50; col. 14: lines 29-33, 52-67; col. 15: lines 18-44].

Response to Arguments

6. Applicant's arguments filed May 31, 2007 have been fully considered but they are not persuasive. Applicant argues that neither Yamato nor Meggers teaches a radio terminal unit that changes the timing of signals that request delivery of packets buffered

by the radio base station according to the operation mode of a communication application running of the radio terminal. Applicant also argues that neither reference mentions a PS-Poll signal. However, the Examiner maintains that these limitations are taught by the references. Both references teach a PS-Poll signal in that they teach a control packet for requesting delivery of buffered packets as this is the function of the PS-Poll as defined in Applicant's specification. Further, both references teach managing the timing of delivery of buffered packets as outlined in the above rejection.

Allowable Subject Matter

7. Claims 19-42 and 61-85 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Conclusion

8. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of

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the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Erika A. Gary whose telephone number is 571-272-7841. The examiner can normally be reached on Monday-Thursday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Charles Appiah can be reached on 571-272-7904. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

EAG
August 6, 2007


ERIKA A. GARY
PRIMARY EXAMINER